

IDA Results-based Measurement System

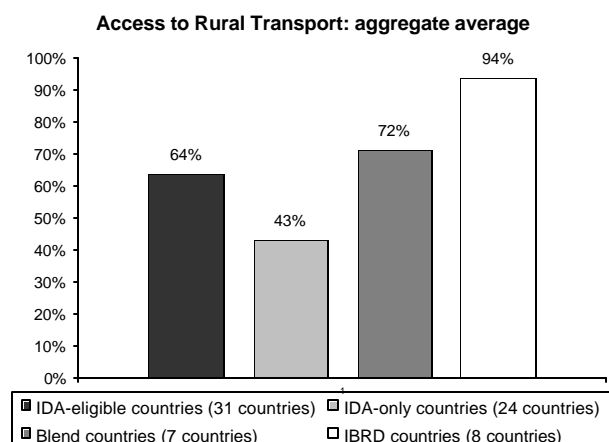
Indicator : Sustainable Access to Rural Transport

Definition.

'Sustainable access to rural transport' measures the number of rural people who live within 2 km (typically equivalent to a walk of 20 minutes) of an all-season road as a proportion of the total rural population. An "all-season road" is a road that is motorable all year round by the prevailing means of rural transport (often a pick-up or a truck which does not have four-wheel-drive) ¹.

Aggregation.

Results for 31 countries (representing 83% of the total rural population in all IDA countries) show that on average 64% of rural dwellers have access to the transport network. The graph also shows a significant difference between 'IDA only' and 'blend' countries. IBRD countries have much better access (94%) on average. Individual country data was weighted by population.



The IDA Countries Included.

Albania, Azerbaijan, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Chad, Ethiopia, Ghana, India, Indonesia, Kenya, Lao PDR, Madagascar, Malawi, Mali, Mongolia, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Papua New Guinea, Tajikistan, Tanzania, Uzbekistan, Vietnam, Yemen, Zambia.

Relevance to Poverty Reduction and MDGs.

Physical isolation is a strong contributor to poverty. Populations without reliable access to social and economic services are poorer than those with reliable access. Problems of access are particularly severe in those rural areas which are distant from roads that carry motorized transport services on a regular basis. It is estimated that about 700 million rural dwellers in developing countries (the great majority of them living in IDA countries) are without reliable access. The large majority of them are poor.

'Sustainable access to rural transport' is not an MDG indicator, but it is a key contribution to achieving many of the Goals - underpinning pro-poor growth and improving social inclusion. Surveys have shown that poor people view isolation as a major contributor to their poverty and marginalization. Therefore, improving access to roads for rural dwellers is considered essential to promote rural development, improve access to human development services, raise incomes and stimulate growth for poverty reduction.

While 'sustainable access to rural transport' is a good indication of the shortfall in rural transport, the full picture requires more detailed information. Before upgrading tracks or paths to motorable condition, the availability of affordable transport services that can be operated on the road should be confirmed.

Sensitivity to Change.

The proposed indicator adequately captures changes in performance over time. Relatively small improvements in access to an all-season road have marked impacts in terms of improving the overall indicator results. An analysis of preliminary measures for two countries with time-series data (during the period of 1997-2002) confirms the sensitivity of the indicator to change over time - showing an average increase in accessibility of about 1%/year.

Current measures of this indicator show a significant difference between IDA (aggregate average of 64%) and IBRD countries (aggregate average of 94%). Amongst the IDA countries there is also a significant difference between those which receive blended assistance (aggregate average of 72%) and those which do not (aggregate average of 43%). Thus, increasing the number of rural people with sustainable access to rural transport is expected to have high and sustainable impact.

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Measurability and Reporting.

There are two main approaches to the measurement of this indicator: (1) household surveys that include information about access to transport, and (2) mapping data to determine how many people live within the specified catchments of the road network. Surveys of households and individuals are the most cost-effective way of obtaining information on rural access. The majority of the 31 available IDA country indicators have been established using this approach. The surveys are designed to produce high-quality data and be representative for the main segments of population (thus, the main subgroup 'rural population' is adequately covered).

In establishing this new indicator, priority has been given to the countries with the highest populations so that the 31 countries already covered amount to 83% of the total rural population of IDA countries. Priority has also been given to those countries with the larger land areas for which rural access is likely to be particularly relevant.

Updates of the indicator will largely depend on the frequency of household surveys. These are usually expected to occur on a three-year cycle. In collaboration with partner organizations, the Bank is developing a work program to ensure the sustainability of the proposed indicator through regular updating of surveys and expansion of coverage to additional countries. It is planned to establish this indicator for an additional 20 IDA countries within the next 12 months so it will be available for over 50 IDA countries by April 2005. A time series will be established for several countries and there will be further benchmarking against 'non-IDA' countries.

Costs (implication for IDA borrowers and the Bank).

The Bank is raising awareness of the significance of the indicator for capturing differences in performance between countries. It is expected that this initiative will help to 'harmonize' relevant rural access questions across household surveys (both for government and donor sponsored surveys) to encourage efficient use of resources by linking with the proposed global household survey network. The inclusion of the rural access indicator in the 2005 edition of World Development Indicators also is being considered.

About 38 IDA countries already have completed national household surveys which include questions that permit this indicator to be estimated. In these cases the marginal cost of producing the indicator is generally up to one day of experienced statistical input. Where there is a suitable survey which does not include a relevant question, there will be a one-off cost to negotiate, design, test and incorporate the question. This cost is estimated to be in the order of three days in addition to the cost of analysis. Where there is no household survey it will be necessary to estimate the indicator by the mapping technique described above. The input for this is estimated to be about one month of analysis for each estimate of the indicator, provided that the necessary data on the location of roads and of the rural population is available.

Note: This note was prepared by Peter Roberts and Cordula Thum from TUDTR.

¹ Predictable interruptions of short duration during inclement weather (e.g. heavy rainfall) are accepted, particularly on low volume roads.